

What is claimed is:

1. A water purifier comprising:

a housing having an inner wall, an outer wall of greater transverse dimension than said inner wall, and a bottom which define a chamber therebetween in the housing;

the housing having a central longitudinal axis and a pair of opposite ends spaced along said axis, said housing being formed with a water inlet at said one end and a water outlet at said other end to allow a flow of water through said chamber in a direction parallel to said axis;

at least one non-magnetic layer disposed in said chamber, said layer extending perpendicularly across said chamber relative to said axis; and

at least one magnetic layer disposed in said chamber, said magnetic layer comprising an annular magnet, said magnetic layer extending perpendicularly across said chamber relative to said axis.

2. The water purifier of claim 1, wherein said non-magnetic layer comprises ceramic.

3. The water purifier of claim 2, wherein said ceramic comprises granular ceramic particles.

4. The water purifier of claim 1, wherein said non-magnetic layer comprises granular particles.

5. The water purifier of claim 1, wherein said magnetic layer includes magnetite particles therein.

6. The water purifier of claim 5, wherein said non-magnetic layer comprises granular ceramic particles.

7. The water purifier of claim 1, including a filter adjacent said inlet.

8. The water purifier of claim 7, wherein said magnetic layer is disposed between said filter and said ceramic layer.

9. The water purifier of claim 5, comprising at least a pair of magnetic layers disposed in said chamber, one of said magnetic layers being disposed between said water inlet and said ceramic layer and the other said magnetic layer being disposed between said ceramic layer and said water outlet.

10. The water purifier of claim 9, wherein the respective annular magnets of said magnetic layers generate magnetic lines of force which are parallel to said central longitudinal axis and the direction of said flow of the water.

11. The water purifier of claim 10, wherein the respective annular magnets of adjacent magnetic layers are positioned such that the same polarities of the adjacent annular magnets are facing each other and said magnetic lines of force pass through said magnetic layers and thereby magnetize said magnetite particles.

12. The water purifier of claim 9, wherein the respective annular magnets of adjacent magnetic layers are positioned such that the same polarities of the adjacent annular magnets are facing each other.

13. The water purifier of claim 1, including a filter adjacent said inlet.

14. The water purifier of claim 13, wherein said magnetic layer is disposed between said filter and said non-magnetic layer.

15. The water purifier of claim 1, comprising at least a pair of magnetic layers disposed in said chamber, one of said magnetic layers being disposed between said water inlet and said non-magnetic layer and the other said magnetic layer being disposed between said non-magnetic layer and said water outlet.

16. The water purifier of claim 15, wherein the respective annular magnets of said magnetic layers generate magnetic lines of force which are parallel to said central longitudinal axis and the direction of said flow of the water.

17. The water purifier of claim 16, wherein the respective annular magnets of adjacent magnetic layers are positioned such that the same polarities of the adjacent annular magnets are facing each other and said magnetic lines of force pass through said magnetic layers.

18. The water purifier of claim 15, wherein the respective annular magnets of adjacent magnetic layers are positioned such that the same polarities of the adjacent annular magnets are facing each other.

19. The water purifier of claim 1, wherein the water purifier is a shower filter.

20. The water purifier of claim 5, wherein the water purifier is a shower filter.

21. The water purifier of claim 9, wherein the water purifier is a shower filter.

22. The water purifier of claim 11, wherein the water purifier is a shower filter.

23. A water purifier comprising:

a housing having an inner wall, an outer wall of greater transverse dimension than said inner wall, and a bottom which define a chamber therebetween in the housing.

the housing having a central longitudinal axis and a pair of opposite ends spaced along said axis, said housing being formed with a water inlet at said one end and a water outlet at said other end to allow a flow of water through said chamber in a direction parallel to said axis;

a filter disposed adjacent said inlet;

at least one ceramic layer disposed in said chamber between said filter and said outlet, said ceramic layer comprising granular ceramic particles and extending perpendicularly across said chamber relative to said axis;

at least one pair of magnetic layers disposed in said chamber, each said magnetic layer comprising an annular magnet and magnetite particles extending perpendicularly across said chamber relative to said axis, one of said magnetic layers being disposed between said filter and said ceramic layer, and the other of said magnetic layers being disposed between said ceramic layer and said outlet; and

at least a pair of said annular magnets disposed in said chamber and coaxially surrounding said axis, wherein one of said magnets is located between said ceramic layer and said inlet and the other of said magnets is located between said ceramic layer and said outlet such that said annular magnets generate magnetic lines of force which are parallel to said central longitudinal axis and in the direction of said flow of water, said annular magnets being located in such a manner that the same polarities of adjacent ones of said annular magnets are facing each other, and said magnetic lines of force pass through said magnetic layers and thereby magnetize said magnetite particles in said magnetic layers.

24. The water purifier of claim 23, wherein the water purifier is a shower filter.